

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number  
**WO 2004/108840 A2**

(51) International Patent Classification<sup>7</sup>: **C09D 7/00**

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(21) International Application Number:  
PCT/US2004/017331

(22) International Filing Date: 3 June 2004 (03.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10/453,410 3 June 2003 (03.06.2003) US  
10/743,956 23 December 2003 (23.12.2003) US  
10/818,158 5 April 2004 (05.04.2004) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

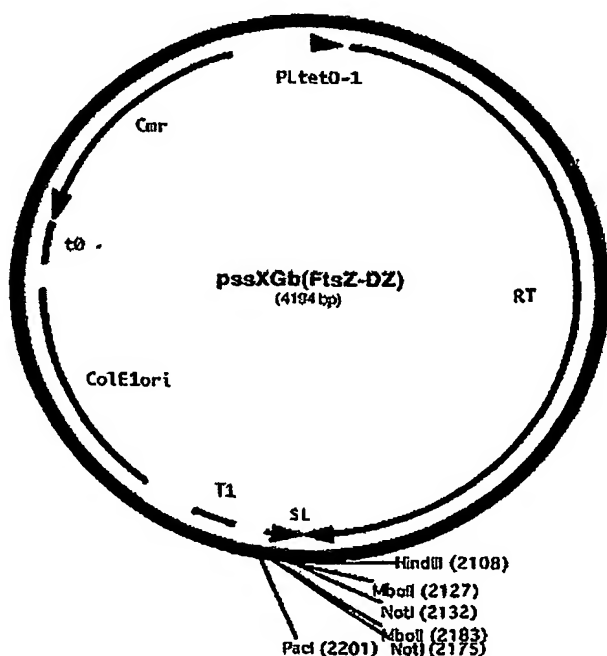
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: NUCLEOTIDES FOR PREVENTION AND TREATMENT OF BACTERIAL AND FUNGAL PATHOLOGIES



(57) Abstract: A selectively inducible, single-stranded DNA (ssDNA) expression library, a method for constructing a ssDNA expression library, a method for screening ssDNA using the expression library, and a method for identifying ssDNA molecules that alter expression of bacterial and fungal gene(s) related to cell growth and toxin production and secretion. The screening library is used to, among other things, identify ODNs effective in stopping cell growth, killing bacteria or fungi, or preventing bacteria and/or fungi from synthesizing and secreting their toxins, and/or to discover ODNs effective in eukaryotic (e.g., mammalian) cells for targeted alteration of gene function. The library is also useful for identifying ssDNAs or ODNs that are used as therapeutic agents for, for instance, providing a method for treatment of bacterial infections such as sepsis.

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